

## EAST Search History

| Ref # | Hits | Search Query  | DBs                    | Default Operator | Plurals | Time Stamp       |
|-------|------|---|------------------------|------------------|---------|------------------|
| L3    | 5    | (("20030155238") or ("6614238") or ("6511851") or ("5103181") or ("20020118027")).PN.   | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2008/03/27 10:45 |
| L4    | 1    | L3 and plasma   | US-PGPUB; USPAT; USOCR | ADJ              | ON      | 2008/03/27 10:45 |
| L5    | 30   | (US-20040135590-\$ or US-20020155615-\$ or US-20040118348-\$ or US-20040037746-\$ or US-20020038761-\$ or US-20030155238-\$ or US-20020118027-\$).did. or (US-5339886-\$ or US-4977094-\$ or US-5079507-\$ or US-6038914-\$ or US-6835552-\$ or US-4207137-\$ or US-4711767-\$ or US-6509542-\$ or US-6916658-\$ or US-6563076-\$ or US-5531097-\$ or US-3857284-\$ or US-6511851-\$ or US-5553495-\$ or US-5415784-\$ or US-6858433-\$ or US-5007983-\$ or US-5631418-\$ or US-5399977-\$ or US-6841389-\$ or US-6767747-\$ or US-5103181-\$ or US-6614238-\$). did. | US-PGPUB; USPAT        | ADJ              | ON      | 2008/03/27 10:45 |
| L6    | 12   | l5 and plasma   | US-PGPUB; USPAT; USOCR | ADJ              | ON      | 2008/03/27 10:45 |
| L7    | 8    | l5 and plasma same (excit\$7 or energy) and impedance   | US-PGPUB; USPAT; USOCR | ADJ              | ON      | 2008/03/27 10:46 |
| L8    | 8    | l5 and plasma same (excit\$7 or energy) and impedance   | US-PGPUB; USPAT; USOCR | ADJ              | ON      | 2008/03/27 10:47 |
| L9    | 2    | l8 and solid with gas   | US-PGPUB; USPAT; USOCR | ADJ              | ON      | 2008/03/27 10:47 |
| L10   | 4    | l8 and solid and gas  | US-PGPUB; USPAT; USOCR | ADJ              | ON      | 2008/03/27 10:47 |
| L11   | 6    | l8 and (advantag\$4 or benefit\$7)  | US-PGPUB; USPAT; USOCR | ADJ              | ON      | 2008/03/27 10:49 |

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|-----|---------|---|------------------------|-----|-----|------------------|
| L12 | 4       | I8 and (advantag\$4 or benefi\$7) same plasma   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 10:50 |
| L13 | 1       | ("5939886").PN.   | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/27 10:51 |
| L14 | 0       | I13 and impedance same (concentration or density or composition or constituen\$4 or type)                                 | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 10:51 |
| L15 | 0       | I13 and impedance same (concentration or density or composition or constituen\$4 or type)                                 | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 10:51 |
| L16 | 1       | I13 and impedance   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 10:52 |
| L17 | 4617961 | @ad<"20040219"  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 10:58 |
| L18 | 22      | L17 and detect\$4 with solid with gas and excit\$4 with plasma  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 10:58 |
| L19 | 2       | L17 and detect\$4 with solid with gas and excit\$4 with plasma and impedance  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 10:59 |
| L20 | 1       | I13 and (advantag\$4 or benefi\$7) same plasma  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:01 |
| L21 | 1       | ("20040135590").PN.   | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/27 11:01 |
| L22 | 1       | I21 and (advantag\$4 or benefi\$7) same plasma  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:01 |
| L23 | 1       | I13 and plasma same (excit\$7 or energy or produc\$4 or creat\$4) and impedance   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:06 |
| L24 | 1       | I13 and plasma with (excit\$7 or energy or produc\$4 or creat\$4) and impedance   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:06 |
| L25 | 12      | I5 and plasma and impedance   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:10 |
| L26 | 2       | I5 and plasma with (excit\$7 or energy or produc\$4 or creat\$4) same (advantag\$4 or benefi\$7 or purpose or motivat\$4) | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:12 |

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|-----|------|--|------------------------|-----|-----|------------------|
| L27 | 2    | I5 and plasma with (excit\$7 or energy or produc\$4 or creat\$4) same (advantag\$4 or benefi\$7 or purpose or motivat\$4) and impedance  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:13 |
| L28 | 1726 | I17 and plasma with (excit\$7 or energy or produc\$4 or creat\$4) same (advantag\$4 or benefi\$7 or purpose or motivat\$4) and impedance not I27   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:15 |
| L29 | 22   | I17 and plasma with (excit\$7 or energy or produc\$4 or creat\$4) same (advantag\$4 or benefi\$7 or purpose or motivat\$4) and impedance same gas with solid not I27   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:15 |
| L30 | 56   | I17 and plasma with (excit\$7 or energy or produc\$4 or creat\$4) same (advantag\$4 or benefi\$7 or purpose or motivat\$4) and impedance same ((gas with solid) or (measur\$4 with (concentration or density or composition or consituen\$4 or type))) not I27 | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:16 |
| L31 | 8    | I17 and plasma with (excit\$7 or energy or produc\$4 or creat\$4) same (advantag\$4 or benefi\$7 or purpose or motivat\$4) and impedance same gas same (measur\$4 with (concentration or density or composition or consituen\$4 or type))                      | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:17 |
| L32 | 2    | I17 and easy with measur\$4 with plasma with gas   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:24 |
| L33 | 1    | I13 and plasma same (advantag\$4 or benefi\$7 or purpose or motivat\$4)  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:26 |
| L34 | 1    | ("5103181").PN.  | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/27 11:29 |
| L35 | 1    | I21 and plasma and impedance   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:32 |
| L36 | 21   | I5 and react\$4  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:36 |

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|-----|-----|--|------------------------------|-----|----|---------------------|
| L37 | 18  | I5 and (reactive or reaction)  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2008/03/27<br>11:37 |
| L38 | 18  | I5 and (reactive or reaction) and impedance  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2008/03/27<br>11:39 |
| L39 | 0   | I17 and (reaction or reactive) with (gas or plasma) and impedance and electromagnetic circuit and (radio frequency or rf or microwave) and phase and time and (power with watt) and photoresist                        | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2008/03/27<br>11:44 |
| L40 | 0   | I17 and (reaction or reactive) with (gas or plasma) and impedance and electromagnetic circuit and (radio frequency or rf or microwave) and phase and time and (power with watt)  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2008/03/27<br>11:45 |
| L41 | 330 | I17 and (reaction or reactive) with (gas or plasma) and impedance and electromagnetic and (radio frequency or rf or microwave) and phase and time and (power with watt)  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2008/03/27<br>11:45 |
| L42 | 48  | I17 and (reaction or reactive) with (gas or plasma) and impedance and electromagnetic and (radio frequency or rf or microwave) and phase and time and (power with watt) and photoresist                                | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2008/03/27<br>11:45 |
| L43 | 17  | I17 and (reaction or reactive) with (gas or plasma) and impedance and electromagnetic and (radio frequency or rf or microwave) and phase and time and (power with watt) and photoresist with remov\$4                  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2008/03/27<br>11:48 |
| L44 | 0   | I17 and (reaction or reactive) with (gas or plasma) and impedance and electromagnetic and (radio frequency or rf or microwave) and (phase and time) with impedance and (power with watt) and photoresist with remov\$4 | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2008/03/27<br>11:49 |

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|-----|---|---|------------------------|-----|-----|------------------|
| L45 | 1 | I17 and (reaction or reactive) with (gas or plasma) and impedance and energy and (radio frequency or rf or microwave) and (phase and time) with impedance and (power with watt) and photoresist with remov\$4 | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:49 |
| L46 | 1 | ("5103181").PN.   | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/27 11:53 |
| L47 | 0 | I46 and (watt or photoresist)   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 11:53 |
| L48 | 1 | ("20050186680").PN.   | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/27 12:20 |
| L49 | 1 | I48 and convey\$4   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 12:20 |
| L50 | 1 | I34 and (advantag\$4 or benefit\$7 or purpose or motivat\$4)  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 12:28 |
| L51 | 1 | I48 and microwave plasma  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 12:33 |
| L52 | 1 | ("3569777").PN.   | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/27 12:34 |
| L53 | 0 | I52 and microwave   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 12:34 |
| L54 | 1 | ("20040135590").PN.   | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/27 12:34 |
| L55 | 0 | I54 and microwave   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 12:34 |
| L56 | 9 | I5 and microwave  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 12:35 |
| L57 | 6 | I5 and microwave with plasma  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 12:35 |
| L58 | 6 | I5 and microwave with plasma and impedance  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 12:37 |
| L59 | 1 | I52 and impedance with (phase and time)   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/27 12:37 |

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|-----|----|---|------------------------------|-----|-----|---------------------|
| L60 | 1  | I52 and watt  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/27<br>12:39 |
| L61 | 1  | I52 and photoresist   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/27<br>12:41 |
| L62 | 3  | (("3569777") or ("5103181") or ("20040135590")).PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR  | OFF | 2008/03/27<br>12:42 |
| L63 | 0  | I62 and (micro wave or microwave)   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/27<br>12:42 |
| L64 | 3  | I5 and microwave with plasma same impedance   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/27<br>12:44 |
| L65 | 2  | I5 and microwave with (rf or radio frequency)   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/27<br>12:45 |
| L66 | 2  | I5 and microwave with (advantag\$4 or benefi\$7 or purpose or motivat\$4)   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/27<br>12:46 |
| L67 | 1  | I52 and plasma  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/27<br>12:47 |
| S1  | 3  | (("6429935") or ("6543459") or ("6614215")).PN.   | US-PGPUB;<br>USPAT           | OR  | OFF | 2007/05/07<br>11:53 |
| S2  | 19 | (("3931587") or ("4608869") or ("5685802") or ("4926120") or ("5079507") or ("5419176") or ("5467188") or ("5479254") or ("5471357") or ("5517161") or ("5691642") or ("5708209") or ("5742234") or ("5987972") or ("6081329") or ("6377345") or ("6429935") or ("6543459") or ("6614215")).PN. | US-PGPUB;<br>USPAT           | OR  | OFF | 2007/07/03<br>09:38 |
| S3  | 2  | electromagnetic circuit and S2  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/05/07<br>11:56 |
| S4  | 1  | electromagnetic circuit same detect same solid same material  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/05/07<br>11:56 |
| S5  | 2  | electromagnetic circuit same detect same solid  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/05/07<br>11:57 |
| S6  | 46 | electromagnetic circuit same detect   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/05/07<br>11:57 |

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|-----|---------|---|------------------------|-----|-----|------------------|
| S7  | 6       | electromagnetic circuit same detect same (gas or presence)  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/05/07 11:57 |
| S8  | 8       | impedance and S2  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/05/07 12:36 |
| S9  | 2       | electric same impedance and S2  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/05/07 12:36 |
| S10 | 0       | (10/708251).OCLS.   | US-PGPUB; USPAT        | OR  | OFF | 2007/05/07 12:59 |
| S11 | 1       | 10/708251   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/05/07 12:59 |
| S12 | 1653    | 436/149-154.ccls.   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 09:38 |
| S13 | 1083    | S12 and @ad<="20040219"   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 09:53 |
| S14 | 221     | S13 and impedance   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 09:44 |
| S15 | 66      | S13 and impedance.clm.  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 09:40 |
| S16 | 19      | (("3931587") or ("4608869") or ("5685802") or ("4926120") or ("5079507") or ("5419176") or ("5467188") or ("5479254") or ("5471357") or ("5517161") or ("5691642") or ("5708209") or ("5742234") or ("5987972") or ("6081329") or ("6377345") or ("6429935") or ("6543459") or ("6614215")).PN. | US-PGPUB; USPAT        | OR  | OFF | 2007/07/03 09:44 |
| S17 | 8       | S16 and impedance   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 09:52 |
| S18 | 5368    | (impedance with measur\$4). clm.  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 09:55 |
| S19 | 4578888 | @ad<="20040219"   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 09:53 |
| S20 | 14756   | 324/600-727.ccls.   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 09:55 |

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|-----|------|--|------------------------------|-----|----|---------------------|
| S21 | 7923 | S20 and S19  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2007/07/03<br>09:55 |
| S22 | 624  | (impedance with measur\$4).<br>clm. and S21  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2007/07/03<br>09:55 |
| S23 | 35   | (impedance with measur\$4).<br>clm. and S21 and plasma   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2007/07/03<br>10:08 |
| S24 | 1302 | (73/29.01 73/29.02<br>73/335.01 73/335.02<br>73/335.05).cls.   | US-PGPUB;<br>USPAT;<br>USOCR | OR  | ON | 2007/07/03<br>10:08 |
| S25 | 539  | S24 and S19  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2007/07/03<br>10:08 |
| S26 | 12   | (impedance with measur\$4).<br>clm. and S25  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2007/07/03<br>10:12 |
| S27 | 16   | (impedance).clm. and S25<br>not S26  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2007/07/03<br>10:17 |
| S28 | 1169 | impedance and microwave<br>and radio frequency and<br>plasma and phase   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2007/07/03<br>10:18 |
| S29 | 7    | (impedance and microwave<br>and radio frequency and<br>plasma and phase).clm.  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2007/07/03<br>12:28 |
| S30 | 4    | (impedance and microwave<br>and radio frequency and<br>plasma and phase).clm. and<br>S19   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2007/07/03<br>12:29 |
| S31 | 19   | (US-20020155615-\$ or US-<br>20040135590-\$ or US-<br>20040118348-\$).did. or (US-<br>6916658-\$ or US-6858433-\$<br>or US-6841389-\$ or US-<br>6835552-\$ or US-6511851-\$<br>or US-5415784-\$ or US-<br>4977094-\$ or US-5079507-\$<br>or US-5399977-\$ or US-<br>5631418-\$ or US-5553495-\$<br>or US-3857284-\$ or US-<br>6038914-\$ or US-5531097-\$<br>or US-6563076-\$ or US-<br>6509542-\$).did. | US-PGPUB;<br>USPAT           | ADJ | ON | 2007/07/03<br>11:01 |
| S32 | 19   | S31 and impedance  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2007/07/03<br>11:41 |
| S33 | 213  | 422/82.01.cls. and<br>impedance  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON | 2007/07/03<br>11:41 |

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|-----|-----|--|------------------------|-----|-----|------------------|
| S34 | 50  | 422/82.01.cds. and impedance.cdm.  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 11:41 |
| S35 | 46  | 422/82.01.cds. and impedance.cdm. and S19  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 11:46 |
| S36 | 309 | (detect\$4 or measur\$4) and plasma and (electromagnetic or circuit) and impedance and amount with solid and S19   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 11:49 |
| S37 | 8   | (detect\$4 and measur\$4) and plasma and (electromagnetic or circuit) and impedance.ab. and amount with solid and S19  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 11:49 |
| S38 | 1   | (plasma and species and photoresist and heat\$3 and gas and impedance).clm.  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 12:31 |
| S39 | 768 | (plasma and species and photoresist and heat\$3 and gas and impedance)   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 12:31 |
| S40 | 438 | (plasma and species and photoresist and heat\$3 and gas and impedance and (electromagnetic or circuit) and reactive) and S19   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 12:32 |
| S41 | 46  | (plasma and species and photoresist and heat\$3 and gas and impedance and (electromagnetic or circuit) and reactive) and S19 and ("422" or "436" or "324" or "73").clas. | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 14:04 |
| S42 | 5   | ("(4207137") or ("7411767") or ("5939886") or ("5631418") or ("5531097") or ("5079507")).PN.   | US-PGPUB; USPAT        | OR  | OFF | 2007/07/03 17:03 |
| S43 | 2   | microwave and S42  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 14:12 |
| S44 | 2   | (radio frequency or rf) and S42  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 14:13 |
| S45 | 3   | (magnitude or phase) with impedance and S42  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 14:13 |
| S46 | 107 | 364/482.ids.   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2007/07/03 14:29 |
| S47 | 1   | ("5007983").PN.  | US-PGPUB; USPAT        | OR  | OFF | 2007/07/03 14:28 |

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|-----|-----|--|------------------------------|-----|-----|---------------------|
| S48 | 107 | 364/482.ids.   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>14:29 |
| S49 | 5   | impedance and plasma and S48   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>14:29 |
| S50 | 6   | ("4207137") or ("4711767") or ("5939886") or ("5631418") or ("5531097") or ("5079507").PN. | US-PGPUB;<br>USPAT           | OR  | OFF | 2007/07/03<br>17:12 |
| S51 | 0   | solid material and S50   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:12 |
| S52 | 1   | microwave and (radio frequency or rf) and S50  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:27 |
| S53 | 3   | impedance with phase and S50   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:31 |
| S54 | 1   | 10/708251  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:39 |
| S55 | 3   | photoresist and S50  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:41 |
| S56 | 2   | ("4207137") or ("4711767").PN.   | US-PGPUB;<br>USPAT           | OR  | OFF | 2007/07/03<br>17:41 |
| S57 | 0   | microwave and S56  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:41 |
| S58 | 2   | heat\$3 and S56  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:42 |
| S59 | 2   | gas and plasma and S58   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:42 |
| S60 | 2   | photoresist and S59  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:42 |
| S61 | 2   | impedance and S60  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:43 |
| S62 | 1   | S61 and phase  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:45 |
| S63 | 0   | "5939886".pn. and heat\$3  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:44 |
| S64 | 1   | S61 and watts  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:51 |

|     |         |   |                              |     |     |                     |
|-----|---------|---|------------------------------|-----|-----|---------------------|
| S65 | 2       | S61 and w   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2007/07/03<br>17:46 |
| S66 | 1709    | 436/149-154.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>13:46 |
| S67 | 1304    | 422/82.01-82.04.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>13:47 |
| S68 | 1828    | 73/25.01-28.06.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>13:48 |
| S69 | 4617943 | @ad<"20040219"  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>13:48 |
| S70 | 2598    | (S66 or S67 or S68) and S69   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>13:48 |
| S71 | 458     | S70 and impedance   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>13:49 |
| S72 | 0       | S70 and impedance same<br>(detect\$4 or measur\$4) with<br>solid with (gas or medium)   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>13:50 |
| S73 | 31      | S70 and impedance and<br>(detect\$4 or measur\$4) with<br>solid with (gas or medium)  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>13:50 |
| S74 | 24      | (richard near2 pingree or<br>palanikumara near2 sakthivel<br>or muhesh near2 vanodia or<br>michael near2 colson).in.                          | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>14:07 |
| S75 | 5       | (richard near2 pingree or<br>palanikumara near2 sakthivel<br>or muhesh near2 vanodia or<br>michael near2 colson).in. and<br>S69 and impedance | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>14:07 |
| S76 | 1       | (richard near2 pingree and<br>palanikumara near2 sakthivel<br>and muhesh near2 vanodia<br>and michael near2 colson).in.                       | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>14:07 |
| S77 | 15      | S70 and resistance same<br>(detect\$4 or measur\$4) with<br>solid with (gas or medium)  | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>14:08 |
| S78 | 1       | ("5103181").PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR  | OFF | 2008/03/26<br>14:12 |
| S79 | 1       | S78 and impedance   | US-PGPUB;<br>USPAT;<br>USOCR | ADJ | ON  | 2008/03/26<br>14:12 |

|     |     |   |                        |     |     |                  |
|-----|-----|---|------------------------|-----|-----|------------------|
| S80 | 1   | S78 and impedance and (chamber or vessel or energy)   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 14:22 |
| S81 | 117 | ("1726721"   "1877810"   "2020847"   "2099687"   "2124029"   "2169174"   "2222450"   "2297393"   "2323675"   "2386830"   "2548598"   "2736867"   "2792548"   "3136946"   "3475316"   "3498112"   "3586971"   "3612996"   "3688188"   "3720890"   "3762221"   "3816811"   "3826978"   "3826980"   "3858446"   "3883798"   "3889182"   "3897798"   "3967500"   "4097801"   "4104585"   "4124475"   "4248085"   "4254470"   "4257275"   "4266188"   "4266425"   "4285046"   "4288741"   "4301400"   "4327323"   "4340938"   "4345204"   "4370611"   "4380924"   "4387165"   "4402230"   "4417584"   "4423623"   "4429273"   "4441362"   "4458524"   "4503383"   "4543191"   "4548506"   "4555661"   "4559493"   "4580444"   "4588970"   "4596136"   "4604904"   "4651085"   "4693319"   "4708021"   "4720677"   "4760742").PN.<br>OR ("5103181").URPN. | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 14:26 |
| S82 | 40  | S81 and impedance   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 14:27 |
| S83 | 5   | S81 and impedance and solid with gas  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 14:27 |
| S84 | 3   | ((("4074184") or ("4063153") or ("4082994")).PN.  | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/26 14:29 |
| S85 | 3   | S84 and impedance   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 14:29 |
| S86 | 1   | ("20050186680").PN.   | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/26 14:31 |

|     |    |   |                        |     |    |                  |
|-----|----|---|------------------------|-----|----|------------------|
| S87 | 1  | S86 and reactive species and convey\$4  | US-PGPUB; USPAT; USOCR | ADJ | ON | 2008/03/26 14:32 |
| S88 | 1  | S78 and electromagnetic   | US-PGPUB; USPAT; USOCR | ADJ | ON | 2008/03/26 14:34 |
| S89 | 1  | S78 and circuit   | US-PGPUB; USPAT; USOCR | ADJ | ON | 2008/03/26 14:35 |
| S90 | 1  | S78 and (vesicle or container or chamber or vessel or source or vat or tank)  | US-PGPUB; USPAT; USOCR | ADJ | ON | 2008/03/26 14:52 |
| S91 | 0  | S78 and plasma  | US-PGPUB; USPAT; USOCR | ADJ | ON | 2008/03/26 15:14 |
| S92 | 1  | S81 and plasma  | US-PGPUB; USPAT; USOCR | ADJ | ON | 2008/03/26 15:14 |
| S93 | 1  | S69 and (solid with gas and impedance with measur\$4). ab.  | US-PGPUB; USPAT; USOCR | ADJ | ON | 2008/03/26 15:15 |
| S94 | 1  | S93 and (solid with gas and impedance with measur\$4)   | US-PGPUB; USPAT; USOCR | ADJ | ON | 2008/03/26 15:16 |
| S95 | 21 | S69 and solid with gas with (density or concentration) same impedance with measur \$4   | US-PGPUB; USPAT; USOCR | ADJ | ON | 2008/03/26 15:17 |
| S96 | 29 | (US-20040135590-\$ or US-20020155615-\$ or US-20040118348-\$ or US-20040037746-\$ or US-20020038761-\$).did. or (US-5939886-\$ or US-4977094-\$ or US-5079507-\$ or US-6038914-\$ or US-6835552-\$ or US-4207137-\$ or US-4711767-\$ or US-6509542-\$ or US-6916658-\$ or US-6563076-\$ or US-5531097-\$ or US-3857284-\$ or US-6511851-\$ or US-5553495-\$ or US-5415784-\$ or US-6858433-\$ or US-5007983-\$ or US-5631418-\$ or US-5399977-\$ or US-6841389-\$ or US-6767747-\$ or US-5103181-\$ or US-6614238-\$ or US-6849174-\$).did. | US-PGPUB; USPAT        | ADJ | ON | 2008/03/26 15:21 |
| S97 | 11 | S96 and plasma  | US-PGPUB; USPAT; USOCR | ADJ | ON | 2008/03/26 15:21 |

|      |    |   |                        |     |     |                  |
|------|----|---|------------------------|-----|-----|------------------|
| S98  | 4  | S96 and plasma and impedance and solid and gas  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 15:21 |
| S99  | 9  | S96 and impedance and solid with gas  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 15:21 |
| S100 | 1  | ("20030155238").PN.   | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/26 15:28 |
| S101 | 4  | ((("20030155238") or ("6614238") or ("6511851") or ("5103181")).PN.   | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/26 15:30 |
| S102 | 0  | S101 and plasma   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 15:30 |
| S103 | 3  | S101 and phase  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 15:31 |
| S104 | 0  | S101 and phase with impedance   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 15:31 |
| S105 | 13 | S89 and impedance with phase and gas with solid and plasma and time and react\$4 and (power or watt) and photoresist\$4 | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 15:32 |
| S106 | 5  | ((("20030155238") or ("6614238") or ("6511851") or ("5103181") or ("20020118027")).PN.                                  | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/26 15:45 |
| S107 | 5  | S106 and impedance  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 15:55 |
| S108 | 5  | S106 and impedance and solid  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 15:59 |
| S109 | 0  | S78 and tube  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 16:29 |
| S110 | 1  | S78 and pipe  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 16:32 |
| S111 | 1  | S78 and (vesicle or container or chamber or vessel or vat or tank or receptacle or reservoir)                           | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 16:41 |
| S112 | 1  | S78 and direction   | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 16:58 |

|      |   |   |                        |     |     |                  |
|------|---|---|------------------------|-----|-----|------------------|
| S113 | 5 | S106 and impedance and solid and electromagnetic and circuit              | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 17:01 |
| S114 | 3 | S106 and impedance and solid and electromagnetic and circuit and reactive | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 17:03 |
| S115 | 5 | S106 and (plasma or phase or time)  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 17:13 |
| S116 | 1 | ("4423623").PN.   | US-PGPUB; USPAT; USOCR | OR  | OFF | 2008/03/26 17:14 |
| S117 | 5 | S106 and (plasma or phase same impedance or time)                         | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 17:14 |
| S118 | 5 | S106 and (plasma or phase same impedance or time) and impedance           | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 17:16 |
| S119 | 0 | S116 and impedance and phase  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 17:17 |
| S120 | 0 | S116 and phase  | US-PGPUB; USPAT; USOCR | ADJ | ON  | 2008/03/26 17:18 |

3/27/2008 12:59:40 PM

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